#### Chairman.

No

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Name(s)

#### **REGISTRATION FORM**

## ONE DAY COURSE ON ADVANCED SURFACE ENGINEERING\_WITH SUPERIOR PROPERTIES"

26 JANUARY 2017 at Wisma IEM, Petaling Jaya Closing Date: 23 JANUARY 2017

M'ship No.

Grade

Fee (RM)\*

	Sub T	otal
	Add 6%	GST
	Total Paya	able
*Fees MUST be fully paid BEF0	ORE the CLOSING DATE. Seats could only be	confirmed upon payment.
issued in favour of " <u>The Ins</u> understand that the fee is not	cheque No:for the stitution of Engineers, Malaysia" and crost refundable if I/We withdraw after my/our ed in the cancellation term. If I/We fail to unded.	ssed 'A/C payee only'. I/Wo application is accepted by the
Contact Person:	Designation	on:
Name of Organization:		
Address:		
Telephone No.:	(O)	(Fax)
	(H)	(HP)
Email:		
Signature & Stamp		Date
	Photocopies are acceptable	



### The Institution of Engineers, Malaysia

# ONE DAY COURSE ON "ADVANCED SURFACE ENGINEERING WITH SUPERIOR PROPERTIES"

Date: 26 January 2017 (Thursday)

Venue: Tan Sri Prof. Chin Fung Kee Auditorium, 3rd Floor

Wisma IEM, Petaling Jaya, Selangor

Time: 8.30 a.m. - 5.30 p.m.

Organised By:

Marine Engineering & Naval Architecture Technical Division, IEM
BEM Approved CPD/PDP: Applying

REGISTRATION FEES (SUBJECT TO 6% GST)		
	ONLINE	NORMAL (Offline)
IEM Student Member	RM 150.00	RM 180.00
IEM Graduate Member	RM 250.00	RM 300.00
IEM Corporate Member	RM 400.00	RM 450.00
Non IEM Member	RM 550.00	RM 600.00

#### **IMPORTANT NOTES**

- Closing Date: 23 JANUARY 2017 (MONDAY), payment MUST BE MADE VIA ONLINE PAYMENT [via RHB Now and Maybank2u -Personal Saving & Personal Current; Any Credit Card Visa/Master]. If payment is not received within the stipulated time, the registration fee will automatically be reverted to the normal fee.
- Payment via <u>CASH/CHEQUE/BANK-IN TRANSMISSION/BANK DRAFT/MONEY ORDER/ POSTAL ORDER/LOU/LOG/WALK-IN</u> will be considered as <u>NORMAL REGISTRATION</u>
- <u>FULL PAYMENT</u> must be settled before commencement of the event, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non-refundable. IEM reserve the right to reject any LOU/LOG not in accordance with these instructions.
- The Organising Committee reserves the right to alter or change the programme due to unforeseen circumstances.

#### **SYNOPSIS**

#### **Advanced Surface Engineering with Superior Properties**

The improvement in surface properties (hardness, wear, abrasion and corrosion) can be economically achieved by applying various kinds of coatings. In recent years, there is considerable interest to develop nanostructured coatings to deal with wear and severe corrosion problems. Nanostructured coatings offer noteworthy potential for their utilization in extreme environments.

This short course will provide an opportunity to the participants to become familiar with the fundamentals of surface modification techniques, advancement in the field of coating technology, synthesis and characterization of novel nanostructured coatings well suited to many industrial applications like oil, gas, seawater desalination, petrochemical, automobile industries etc. In addition, this course also covers technical aspects of selection and specification of protective coatings, largely for atmospheric environments. The course provides theoretical and practical information on coatings selection for wear and corrosion control. Inspection is only one part of ensuring a quality coating job, and selecting the correct coating system and writing a good specification are just as important.

#### Who Should Attend?

All manufacturing personnel dealing with decorative and protective coatings and corrosion prevention technology; process, design and specification engineers, quality control technical service, and technical sales. The course is appropriate for current users with limited to very good knowledge of coatings operations, which need or want to learn fundamentals, current trends, and new technologies.

#### **BIODATA OF SPEAKER**

Dr. Reza Mahmoodian is Postdoctoral Research Fellow (PDRF) at Malaysia's first and leading research university, the University of Malaya (UM) and formerly a visiting researcher at University of California, Los Angeles-UCLA, USA. He started working since 1999 including 10 years in industries (Manufacturing and Oil&Gas), 7 years' academics (simultaneously 7 years as industry consultant to Azarin Kar Ind. Co, in Coating and manufacturing process). He obtained his PhD (Mechanical Engineering) and MEng (Manufacturing Engineering) from University of Malaya (Malaysia) in 2013 and BEng from Kerman Azad University (Iran). His current research field is advanced material processing & advanced surface engineering including Development of Powder-based Target physical vapor deposition for functional this films and Thin Film Bio-coating, Antimicrobial coatings, etc at the Centre of Advanced Manufacturing and Material Processing (AMMP). Dr. Reza is actively involved in Knowledge and Technology Transfer to manufacturing Industries and enterprises. As a visiting scientist, Dr. Reza has expanded his network to University of California, Los Angeles (UCLA) during his visit in 2015 and 2016 to establish joint research and collaborations in the field of thin film and 3D-ICs technology. He was previously attached to National Chiao Tung University (NCTU) and National Tsing Hua University (NTHU) in Hsinchu and National Chung Cheng University (CCU), Chiayi, Taiwan (ROC) in 2012-2015, as visiting researcher, have been doing research focused on "Combustion synthesis assisted friction stir welding" at CCU. He has participated in several international lectures and training around the world including (USA, Japan, Australia, China, Iran, Malaysia, Singapore, and Taiwan).

#### **BIODATA OF SPEAKER**

Ir. Dr. Ching has been practicing as a material engineer for the past ten years in polymer industrial. She has obtained her Doctor of Philosophy in Mechanical Engineering in 2011 from the University of Malaya. Now, she has more than 17 years of experience in the field of Materials Engineering and Polymer Technology in both academia and private industry. She has published more than 55 research articles in various ISI/WoS- and Scopus-listed publications.

Ir. Dr. Ching has filed numerous intellectual property rights /patents for her inventions and received many accolades as a distinguished scholar. She is filling a few patents, trademarks and copyrights which stem from his specialty research. She has 6 gold awards and 2 Best Invention Awards at international/national exhibitions pertaining to her research and inventions. Her invention on bionanocomposite coating has won the Best of the Best Award and Gold Medal in 4th International Invention, Innovation & Design, INDES 2015. Her another invention (A Novel Nanobiocomposite Lacquer for Agricultural Greenhouse Film) has won the Gold Medal in International Invention, Innovation & Technology Exhibition, 2013 (ITEX 2013). She also won another Gold medals for her novel bionanocomposite coating lacquer in Malaysia Invention & Innovation Awards (MTE 2013). She also won another 2 silvers in MTE2014, 2 golds in ITEX 2015 and 1 Gold Medal in ITEX 2016. Ir. Dr. Ching is a Chartered Engineer with the Engineering Council, UK and a Professional Engineer with the Board of Engineers Malaysia. She is also served as Fellow of 2 prominent professional societies. i.e. The Institution of Mechanical Engineers UK and Institution of Engineers Malaysia

#### **COURSE SCHEDULE & OUTLINE**

Day 1 – 26 January 2017		
0830 - 0850	Registration	
0850 - 1030	Introduction to Advanced Surface engineering	
1030 - 1045	MORNING TEA BREAK	
1045 - 1300	Surface modification techniques	
1300 - 1400	LUNCH BREAK	
1400 - 1530	Synthesis and characterization of nanostructured coatings	
1530 - 1545	AFTERNOON TEA BREAK	
1545- 1630	Material selection and specification of protective co	
1630 - 1700	Corrosion prevention Technology	